

TEXT OF PREVIOUSLY-FILED OFFICE ACTION RESPONSE:

In reply to the Final Office Action of November 16, 2005, Applicant submits the following remarks.

Claims 1-22 are pending. Applicant thanks the Examiner for recognizing that claims 7, 8, 14, 15, 20 and 21 contain allowable subject matter.

Claims 16-18 and 22, however, were rejected for failing to comply with the enablement requirement of 35 U.S.C. 112. In particular, the Office action alleges claim 16 is a single means claim. Applicant disagrees with this rejection and respectfully requests reconsideration.

The principle articulated by *In re Hyatt* as cited by the Examiner is applicable only to a claim that includes a single limitation expressed in means-plus-function language. That is not the case here. First, the cited claim does not recite the structural term “means” but instead recites “An article comprising *a computer-readable medium*.” Second, the term “computer-readable medium” has a well-known meaning to persons of ordinary skill in the art and is not a “coined term lacking a clear meaning.” See *Personalized Media Communications LLC v. ITC*, 161 F.3d 696, 704 (Fed. Cir. 1998) (discussing the term “digital detector”). Although the term “computer-readable medium” may not specifically evoke a particular structure, it does convey to a person knowledgeable in the art a variety of structures known as “computer-readable media.” That indicates that the “computer-readable medium” limitation is not subject to section 112, par. 6. Therefore, the principle discussed by *In re Hyatt* is inapplicable to claims 16-18, 22 and the rejection should be withdrawn.

Claims 1-6, 9-13, 16-19 and 22 were rejected as unpatentable over Kobayashi et al. (U.S. Patent No. 6,029,264) in view of Steele et al. (U.S. Patent No. 4,393,276).

Independent claims 1, 6, 9, 13, 16 and 19 recite either a method of decoding channel data, an apparatus for decoding channel data, or a computer-readable medium that contains instructions for decoding channel data in which decoding the encoded data recites using a look-up table storing information that approximates the output of an algorithmic decoding process.

For example, look-up table 19 (*see* FIG. 5) is pre-configured to approximate the output of an algorithmic decoding process (pg. 5, lines 20-23). In that example, the entries of the look-up table are chosen so that the table's output response to a given set of N soft symbols corresponds to an approximation of the output of a conventional soft-input soft-output decoder 221 operating on a block of M symbols and in which the approximation can be based on some pre-specified criteria such as the mean square of an error term $E(n)$ (pg. 6, lines 1-13).

Kobayshi et al. discloses an iterative decoding procedure in which received encoded data is passed to ambiguity zone detector AZD at the receiver front end 12 (col. 6, lines 16-17). The AZD then assigns "erasure symbols" to the noisy received data and outputs data having five levels that include $\{0, e, 1, f, 2\}$. The levels e and f correspond to ambiguity zones in which the received data is not clearly a 0, 1 or 2 (col. 8, lines 33-45). The output from the AZD is then iteratively fed to a decoder that attempts to solve as many erasures/errors as possible (col. 6, lines 34-40).

The Office action alleges that quantizing the received packet of encoded data and assigning data erasure symbols to the quantized data by the AZD corresponds to a look-up table that approximates an algorithmic *decoding* process. Applicant respectfully disagrees. First, the received encoded data is not *decoded* by the AZD. The AZD simply quantizes the received encoded data to different output levels (col. 8, lines 40-45). Furthermore, Kobayshi et al. clearly indicates the decoding process is performed by the iterative sequential application of a "generalized maximum likelihood decoder (MLD)" (col. 8, lines 66-67 - col. 9, lines 1-11) and a "generalized Hamming decoder" (col. 9, lines 51-58) which recover the original information sequence (col. 11, lines 13-14). Even if the AZD could be considered to involve a look-up table (which applicant disputes), it does not approximate the output of any algorithmic decoding process. Rather, the AZD assigns values based on the input level of the encoded data (col. 6, lines 16-20). It is, therefore, an approximation of an analog value, and not an algorithmic decoding process. Thus, Kobayashi et al. does not disclose or suggest decoding encoded data using a look-up table that stores the approximating output of an algorithmic decoding process.

Furthermore, Steele et al., individually or in combination with the Kobayashi et al. reference, does not disclose or suggest that feature or the claimed subject matter.

At least for the foregoing reasons, claims 1, 6, 9, 13, 16 and 19 should be allowed. Claims 2-5, 10-12, 17-18 and 22 depend from these claims and should be allowed for the same reasons.

It is believed all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

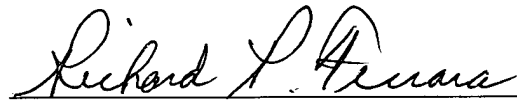
CONCLUSION:

Since, except for the introductory section, this office action response is substantially identical to the substance of the previously-filed (but not considered) office action response, no fee is believed to be due. However, if a fee is due, please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: _____

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